



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

APR 07 2015

REPLY TO THE ATTENTION OF:  
WC-15J

CERTIFIED MAIL 7014 2870 0001 9580 7566  
RETURN RECEIPT REQUESTED

Ex. 6 (Personal Privacy)

FOIA Ex. 6 (Personal  
Privacy)

Pork, Inc

FOIA Ex. 6 (Personal Privacy)

Subject: April 3, 2014 Compliance Evaluation Sampling Inspection

Dear **Ex. 6**:

Enclosed, please find a copy of the U.S. Environmental Protection Agency Inspection Report for the Concentrated Animal Feeding Operation inspection conducted at the **Ex. 6** **Ex. 6** Pork Facility on April 3, 2014. The purpose of the inspection was to evaluate and document compliance of the **Ex. 6** (Personal Privacy) **Ex. 6** (Personal Privacy) Pork facility with the Clean Water Act and the Administrative Order issued to **Ex. 6** (Personal Privacy) **Ex. 6** (Personal Privacy) Pork, Inc. on August 20, 2013 (Docket Number V-W-13-AO-09).

Should you find anything in the report that you disagree with, please provide a detailed response within thirty (30) calendar days.

Thank you for your prompt attention to this matter. If you have any questions, please contact Joan Rogers of my staff at (312) 886-2785.

Sincerely,

Ryan J. Bahr, Chief, Section 2  
Water Enforcement and Compliance Assurance  
Branch

Cc: Bud Bridgewater, IEPA  
Jeffrey Holste, Champaign Region, IEPA

Enclosure

**CWA COMPLIANCE EVALUATION INSPECTION REPORT**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 5**

**Purpose:**

Compliance Evaluation Sampling Inspection

**Facility:**

FOIA EX 6 [REDACTED] Pork, Inc  
Rural Route 1 Box 158  
Sigel, IL 62462  
Shelby County  
38.243N, 88.482W

**NPDES Permit Number:**

N/A

**Date of Inspection:**

April 3, 2014

**EPA Representatives:**

Joan Rogers, Environmental Scientist/Enforcement Officer

312-886-2785

rogers.joan@epa.gov

Cheryl Burdett, Life Scientist/Enforcement Officer

312-886-1463

burdett.cheryl@epa.gov

**State Representatives:**

None

**Facility Representatives:**

Ex. 6 [REDACTED] President

Ex. 6

**Report Prepared by:**

Joan Rogers, Environmental Scientist

**Report Date:**

May 14, 2014

**Inspector Signature**



Handwritten signature of Joan A. Rogers over a horizontal line.

## 1. BACKGROUND

The purpose of this report is to describe, evaluate and document [FOIA Ex. 6 (Personal Privacy)] Pork's compliance with the Clean Water Act (CWA) and with its Administrative Order (Docket Number V-W-13-AO-09) at its Sigel, Illinois facility on April 3, 2014. EPA conducted a previous inspection at the facility on July 10, 2012. During that inspection, EPA performed a records review in the office of the facility with the facility owner. Following the records review EPA conducted a walkthrough of the facility. The facility owner declined to accompany EPA on the walkthrough of the facility. Discharges of manure and process wastewater were observed and the areas of concern were discussed with the facility owner during the closing conference.

On November 13, 2012, EPA conducted another inspection to observe any improvements to the facility. The facility owner was not present at the facility but his adult son agreed to show EPA around the facility. The facility owner's [Ex. 6] was familiar with the site and EPA's previous inspection. The facility's manager also accompanied EPA on the inspection. The facility manager is intricately involved with the running of the site. EPA did not perform another records review, but focused directly on the areas of concern that were observed at the July inspection.

From the July 2012 inspection, EPA learned the [FOIA Ex. 6 (Personal Privacy)] Pork, Inc. is a nursery to finish swine facility located in Shelby County, Illinois. The facility owner is also the president of the [FOIA Ex. 6 (Personal Privacy)] Pork, Inc. and manages the activities at that facility. [FOIA Ex. 6 (Personal Privacy)] Pork, Inc. [FOIA Ex. 6 (Personal Privacy)] is considered a large swine Concentrated Animal Feeding Operation (CAFO) due to the number of hogs greater than 55 pounds maintained on the facility.

[FOIA Ex. 6 (Personal Privacy)] is located adjacent to a perennial unnamed tributary which flows approximately 3.5 miles to perennial Henry Creek. After that, Henry Creek flows 1.8 miles to Green Creek and then Green Creek flows 4.9 miles to the Little Wabash River. Little Wabash River then flows 196 miles to the Wabash River, which then flows 18 miles to the Ohio River. The Little Wabash River is a Traditional Navigable Water 15.8 miles from the confluence with the Wabash River. The Little Wabash River at the confluence with Green Creek has been assessed and is listed on the Clean Water Act's Section 303(d) list of impaired waters. It is impaired for dissolved oxygen and mercury. The Illinois Environmental Protection Agency (IEPA) had never been to the facility prior to the July 2012 inspection.

Based on the findings at the July and November 2012 inspections, EPA issued the previously mentioned Administrative Order (Order) to the facility owner. The Order required the facility owner to immediately cease all unauthorized discharges, install permanent controls to prevent discharges to the perennial tributary, develop and implement a Comprehensive Nutrient Management Plan (CNMP) and apply for a National Pollutant Discharge Elimination System (NPDES) Permit. Since that time, the facility owner has provided documentation that he has implemented interim measures, hired a technical service provider to update the CNMP and has made plans for the



construction of permanent measures to prevent unauthorized discharges to the perennial tributary. In a compliance letter sent by email on January 14, 2014, the facility owner has declined to apply for an NPDES Permit.

Concerned that the facility's interim measures were not sufficient to prevent unauthorized discharges, EPA conducted a compliance inspection on April 3, 2014. Since EPA had previously reviewed the facility's records, the inspection consisted of a meeting in the facility office with the facility owner and the farm manager, and a walk through of the facility. Based on the observations at the site, EPA took samples.

## **2. SITE INSPECTION**

**Table 1: Site Entry**

<b>Arrival Time:</b>	8:45 A.M.
<b>Temperature:</b>	60°F
<b>Precipitation:</b>	Raining throughout the entire inspection.
<b>Presented credentials?</b>	Yes
<b>Credentials presented to whom and at what time?</b>	The facility owner at 8:45 A.M.
<b>EPA vehicle parked in approved location?</b>	Yes
<b>Location where EPA vehicle was parked?</b>	Next to the office.
<b>Disposable boots worn?</b>	Yes
<b>Other bio-security measures taken:</b>	Car wash following the inspection. EPA did not enter any buildings where animals were confined.

### **2.1 Records Review (No records were reviewed during the inspection.)**

### **2.2 Walkthrough of the Facility**

EPA began the walkthrough of the facility on the west side of the Nursery Barn. The facility owner declined to walk around with EPA, but the facility manager did accompany EPA. In the office, the facility owner stated that he had over 100 nursery pigs die the day before. Plastic clogged the aerator in the pit below the nursery and caused it to spray the contents of the pit up into the nursery floor. The pigs died from the hydrogen sulfide in the manure. The facility owner stated that the facility hadn't been able to get all the dead pigs into the compost pile and that they were stacked outside the Nursery Barn for longer than a day. Not seeing a pile of dead pigs, EPA inquired about them and the facility manager stated that they had all been put into the compost pile and that they did not remain stacked outside for longer than one day.

A roadside ditch flowed to the south in front of the Nursery Barn. There was flow in the ditch.



EPA walked north around the north end of the Nursery Barn and then south on the east side of it. The vegetation below the fans was brown and appeared to be nutrient burned. East of the Nursery Barn, the perennial unnamed tributary flows southwest, parallel to Interstate Highway 57. South of the Nursery Barn, the stream turns to the west. The roadside ditch from the east side of the Nursery Barn joins the stream in that location. The perennial tributary was very full and slightly overtopped the facility's access road across it.

**Note: The time stamp on the photos is not correct. EPA documented in the inspectors' field log books that they arrived at the facility at 8:45 A.M. and spent time in the office discussing the purpose of the inspection and updates at the facility. Although the time stamp isn't correct, EPA documented in a field log book that the first sample was taken at 10:46 A.M. Using the time stamp of the first sample and calculating backward, the walk through began at approximately at 9:25 A.M. In each photo description, the time has been adjusted based on that starting time.**



1: IMGP0003

Description: Looking upstream at the roadside ditch which flows from the north. Blue arrows indicate flow direction in this and subsequent photos.

Location: West of the Nursery Barn

Camera Direction: North

Date/Time: April 3, 2014 9:26 A.M.





2: IMGP0004

Description: Looking upstream at the perennial tributary that flows from the north on the east side of the Nursery Barn.

Location: South of Nursery Barn

Camera Direction: East

Date/Time: April 3, 2014 9:33 A.M.



3: IMGP0005

Description: The perennial tributary typically flows through a culvert under the facility's access road. On the day of the inspection, the tributary was full and overtopped the road.

Location: South of Nursery Barn

Camera Direction: South

Date/Time: April 3, 2014 9:33 A.M.





4: IMGP0006

Description: The perennial tributary flows to the west along the southern edge of the production area.

Location: South of the Nursery Barn

Camera Direction: West

Date/Time: April 3, 2014 9:33 A.M.

North of the confluence of the stream and the roadside ditch, there are five feed bulk bins. There was feed spilled on the ground around the bulk bins which could be transported with the precipitation to the perennial unnamed tributary.



5: IMGP0008

Description: Feed spilled on the ground near the bulk bins.

Location: East of the Wash Bay

Camera Direction: North

Date/Time: April 3, 2014 9:35 A.M.



EPA walked north to the south side of the open pen for the East Barn. During previous inspections, the manure and process wastewater from this pen could flow under the fencing and over the ground to the perennial unnamed tributary. This area was identified as an area of concern in the July 10, 2012 and November 13, 2012 inspection reports. As an interim measure to prevent unauthorized discharges, the facility owner has placed a dirt berm at the southern edge of the open pen to direct the flow of manure and process wastewater to the west to the southern end of the open pen of the West Barn.

The yard south of the East and West Barns was wet and rutted from machinery. There was spilled feed and sawdust in the yard that could be transported with precipitation to the perennial tributary. The sawdust is used to cover the mortalities in the Compost Pile.



6: IMGP0013

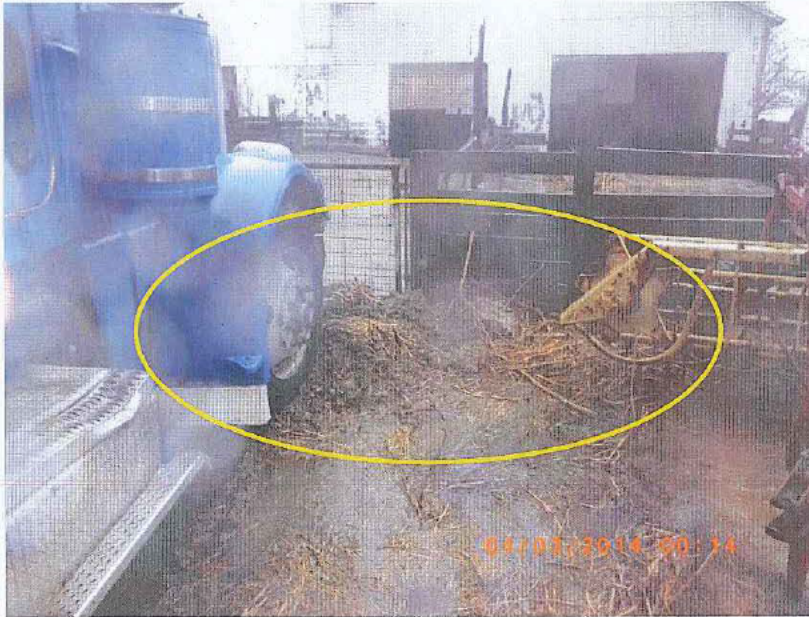
Description: On the day of the inspection, the berm at the southern edge of the open pen was effective at preventing the process wastewater from flowing to the south and to the perennial tributary.

Location: South of the East Barn

Camera Direction: Northwest

Date/Time: April 3, 2014 9:38 A.M.





7: IMGP0014

Description: The berm at the southern edge of the open pen of the East Barn. The process wastewater flowed to the west into the open pen of the West Barn.

Location: South of the East Barn

Camera Direction: North

Date/Time: April 3, 2014 9:39 A.M.



8: IMGP0015

Description: The yard south of the barns was very wet and rutted and there was spilled feed and sawdust on the ground in the yard.

Location: South of the East Barn

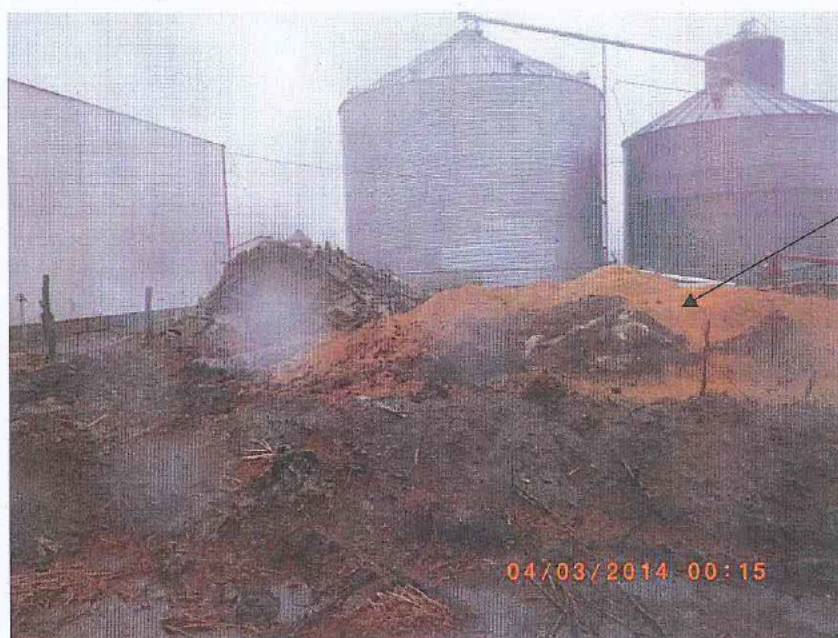
Camera Direction: North

Date/Time: April 3, 2014 9:39 A.M.



South of the East and West Barns was the Compost Pile. Leachate from the Compost Pile was observed and sampled during the November 13, 2012 inspection and identified as a discharge in the Order. As an interim measure, the facility owner created a berm around the Compost Pile. The leachate from the composting mortalities and the process wastewater from precipitation that comes into contact with them is directed to the northwest corner of the Compost Pile where it joins the flow from the open pen of the East Barn. The flow continues to the west at the southern end of the open pen of the West Barn. At the southwest corner of the open pen of the West Barn, there is a standpipe for a pull plug that can be manually lifted to allow flow to enter a pipe beneath the ground. This pipe outlets in a pit on the east side of Finishers Barn #5. From here, the manure and process wastewater is pumped to the 1<sup>st</sup> Stage Manure Pond.

On the day of this inspection, EPA observed that the mortalities in the Compost Pile were not covered properly. The facility manager stated that the young pigs had been placed in the Compost Pile the day before. EPA also observed that the berm on the southeast side of the Compost Pile appeared to be compromised. The berm wall in this area was comprised of a different material than the rest of the berm and appeared to be compost material. Bones were observed in the berm at this section. Leachate from this material was observed in puddles and flow pathway leading from the Compost Pile. The pathway flowed to the southeast to the east of the Wash Bay and then south to the perennial tributary.



9: IMGP0016

Description: The Compost Pile with a two foot high berm around it. The mortalities were not properly covered. Mr. FOIA EX. 6 (Personal) stated that he lost about 100 young pigs the day before. Black arrow points to an exposed mortality.

Location: East of the Compost Pile

Camera Direction: West

Date/Time: April 3, 2014 9:40 A.M.





10: IMGP0019

Description: The southeast corner of the berm around the Compost Pile appeared to be comprised of compost material. Note the difference in color of the berm material. Green arrows denote areas of the berm of differing composition.

Location: Southeast corner of the Compost Pile

Camera Direction: Northwest

Date/Time: April 3, 2014 9:42 A.M.





11: IMGP0020

Description: Leachate from the compost material in the berm was present in the puddles outside the compost pile.

Location: Southeast corner of the Compost Pile

Camera Direction: Northeast

Date/Time: April 3, 2014 9:42 A.M.



12: IMGP0022

Description: Leachate inside the berm of the Compost Pile flows to the northwest corner and then flows west. Red arrows denote location and direction of flow from compost pile.

Location: West side of Compost Pile

Camera Direction: North

Date/Time: April 3, 2014 9:45 A.M.





13: IMGP0023

Description: The flow of process wastewater from the East Barn flows to the West Barn north of the Compost Pile. Red arrow denotes location and direction of flow from the open pen of the East Barn.

Location: Northwest corner of the Compost Pile

Camera Direction: East

Date/Time: April 3, 2014 9:46 A.M.



14: IMGP0024

Description: The flow of process wastewater from the East Barn and the Compost Pile goes to the west, south of open pen of the West Barn. Process wastewater from the West Barn also flows to the west.

Location: South of the West Barn

Camera Direction: Northwest

Date/Time: April 3, 2014 9:47 A.M.





15: IMG0025

Description: At the southwest corner of the open pen of the West Barn is an inlet pipe (white pipe). When opened manually, the process wastewater flows into the pipe and to a reception pit on the east side of Barn #5.

Location: Southwest corner of the West Barn

Camera Direction:

Date/Time: April 3, 2014 9:48 A.M.

West of the West Barn, a storm water pipe inlet lay on the ground. On the day of the inspection, there was flow into this pipe. This pipe outletted in a ditch approximately fifteen feet north of the perennial tributary. During the July 10, 2012 inspection, there was only an open gutter for the stormwater west of the West Barn. A pipe at the end of the gutter transported the flow to the ditch north of the perennial tributary. This gutter also was able to transport manure and process wastewater from the open pen of the West Barn that overflowed into it. After that inspection, the facility owner closed the gutter and added the storm water pipe.

During the July 10, 2012 inspection, EPA observed another pipe entering the gutter from the west. EPA believed it came from the open pens between Barns #3 and #4 but could not observe the beginning of the pipe due to the presence of hogs in the open pens. During the November 13, 2012 inspection, EPA observed that the gutter had been closed and that the pipe leading to it had been capped but EPA was not able to verify that this pipe had been capped off. The facility owner's son stated that the manure and process wastewater from the pens was now flushed to piping that led to the 1<sup>st</sup> Stage Manure Pond via a pull plug at the west end of the pens.





16: IMGP0027

Description: Water flowing into the storm water pipe. There

Location: West of the West Barn

Camera Direction: Down and North

Date/Time: April 3, 2014 9:52 A.M.

To the west of the West Barn was a ramp for feed loading. There was a considerable amount of feed on the ground around the ramp that could be transported with the precipitation to the south and to the perennial tributary.

Also in this area are the concrete footings for two silos. In the fall of 2013, one silo collapsed and the other was taken down. The silo that collapsed fell into the area between Barns #3 and #4. The silo contained corn and the corn spilled on the ground in the open pens between Barns #3 and #4. The facility manager stated that they were still cleaning up from the spilled corn from the collapsed silo.

Bulk bins on the east side of the Finishers Barns had spilled feed below them that could be transported with precipitation to the unnamed tributary either directly or could flow with precipitation to the storm water pipe on the west side of the West Barn and then to the unnamed tributary.





17: IMGP0028

Description: Spilled feed on the ground around the silo area.

Location: West of the West Barn

Camera Direction: West

Date/Time: April 3, 2014 9:53 A.M.



18: IMGP0029

Description: Spilled feed on the ground around the silo area. There used to be two silos on the concrete footings behind the ramp. In the fall of 2013, one collapsed and the other was taken down.

Location: West of the West Barn

Camera Direction: West

Date/Time: April 3, 2014 9:53 A.M.





19: IMG0030

Description: Spilled feed below the bulk bins.

Location: West of the West Barn

Camera Direction: North

Date/Time: April 3, 2014 9:54 A.M.

EPA then observed the area between Barns #3 and #4. Since the collapse of the silo, the fencing for the pens had been removed and this area is not utilized to house hogs anymore. The area was filled with water from the precipitation. During a discussion with the facility manager about the previous piping in this area, he stated that the old pipe that led to the open gutter that used to be west of the West Barn had not been capped and flow could still access the below ground storm water pipe. He pointed to a blue mark on a board near the east end of Barn #3 that denotes the location of the pipe inlet.





20: IMGP0032

Description: Hogs used to be penned between Barn #3 and Barn #4. When the silo collapsed, it fell in this area and spilled the contents of the silo in here. Hogs are no longer confined in this area and the fencing has been removed. In the photo, the red circle denotes where there is a blue mark on the board that indicates the location of a pipe inlet. In a previous inspection, this pipe was identified as joining the storm water pipe on the west side of the West Barn. Although there is standing water in this area, the farm manager said that the pipe was not capped and flow can still access the storm water pipe.

Location: East of Barn #4

Camera Direction: Southwest

Date/Time: April 3, 2014 9:55 A.M.





21: IMGP0033

Description: Fencing to confine hogs has been removed. Spilled grain is evident on the ground and can flow with precipitation to a pipe which outletted in a storm water pipe west of the West Barn.

Location: East of Barn #4

Camera Direction: West

Date/Time: April 3, 2014 9:55 A.M.

EPA then walked to the south to the east side of Barn #2. During the previous inspections, EPA identified manure and process wastewater from the receiving pen flowing into a pipe at the southeast side of a concrete channel that outletted in the ditch north of the unnamed tributary. The facility manager stated that this pipe has been closed by concrete at the end of the pipe.

EPA walked to the ditch that both the pipe from the receiving pen east of Barn #2 and the storm water pipe west of the West Barn outletted into. The ditch is approximately fifteen feet in length and flow in the ditch flowed directly to the perennial unnamed tributary. A pathway of overland flow from the production area also flowed into the ditch. EPA only observed one pipe, the black storm water pipe. The facility manager pointed out the the other pipe was encased in concrete and the outlet of the pipe could not be seen. The overland flow of storm water had eroded a channel under and around the concrete.

There was flow from the black storm water pipe into the ditch and the ditch and the perennial tributary contained water on the day of the inspection.





22: IMGP0036

Description: Pipe in this area has been capped and can no longer transport process wastewater from the receiving pen of Barn #2 to the perennial tributary. Yellow circle denotes location of inlet of pipe in receiving pen concrete channel.

Location: East of Barn #2

Camera Direction: West

Date/Time: April 3, 2014 9:58 A.M.



23: IMGP0037

Description: Flow of storm water from the production area to a ditch that is just north of the perennial tributary.

Location: Southeast of the Wash Bay

Camera Direction: North

Date/Time: April 3, 2014 9:59 A.M.





24: IMGP0038

Description: The black pipe is the outlet of the storm water pipe that originated west of the West Barn. Yellow circle denotes location of the other pipe that outletted here, the one from the receiving pen of Barn #2. This pipe is encased in concrete now.

Location: Southeast of the Wash Bay

Camera Direction: East

Date/Time: April 3, 2014 9:59 A.M.



25: IMGP0040

Description: The black pipe outlets to a ditch which flows approximately 15 feet before it conflues with the perennial tributary.

Location: Southeast of the Wash Bay

Camera Direction: South

Date/Time: April 3, 2014 10:01 A.M.





26: IMGP0041

Description: Looking upstream at the perennial tributary.

Location: The confluence of the ditch and the perennial tributary

Camera Direction: Southeast

Date/Time: April 3, 2014 10:01 A.M.



27: IMGP0043

Description: Looking downstream at the perennial tributary. Note bed and bank structures.

Location: The confluence of the ditch and the perennial tributary

Camera Direction: South

Date/Time: April 3, 2014 10:01 A.M.



EPA walked to the west, south of Barn #1 where the facility owner intends to build a Compost Barn as a permanent measure to prevent leachate from the composting materials from reaching the unnamed tributary. The Compost Barn will be a covered 60' x 10' barn with 12 bays.



28: IMG0047

Description: Location of new Compost Barn which will be 60' long and 10' wide and contain 12 bays.

Location: South of Barn #1

Camera Direction: Southwest

Date/Time: April 3, 2014 10:03 A.M.

EPA then walked to the west and observed the 1<sup>st</sup> and 2<sup>nd</sup> Stage Manure Ponds. There was no staff gauge in either pond, but a pump pipe with nails in it was used by facility personnel to measure the amount of freeboard. EPA and the facility manager observed over four feet of freeboard on the day of the inspection.

A Circular Pit east of the manure ponds received wastewater from the 2<sup>nd</sup> Stage Manure Pond that will be used for flushing the barns. Manure and process wastewater from the barns is pumped to a Reception Pit north of the Circular Pit and then to the 1<sup>st</sup> Stage Manure Pond.

Storm water from between the barns on the west side flows via storm water pipes to the east side of the facility through culverts under the barn walkways.





29: IMGP0050

Description: 2<sup>nd</sup> Stage Manure Pond in the foreground has over four feet of freeboard.

Location: Northwest corner of Barn #2

Camera Direction: Northeast

Date/Time: April 3, 2014 10:08 A.M.



30: IMGP0053

Description: Circular Pit receives wastewater from 2<sup>nd</sup> Stage Manure Pond that will be used for flushing the barns.

Location: Southwest of the Circular Pit

Camera Direction: Northeast

Date/Time: April 3, 2014 10:11 A.M.





31: IMGP0054

Description: Reception pit for manure and process wastewater from the barns before it is pumped to the 1<sup>st</sup> Stage Manure Pond. Also note that storm water on the ground between the barns. The storm water flows into pipes which transport the storm water to the east side of the barns.

Location: East of the 1<sup>st</sup> Stage Manure Pond

Camera Direction: East

Date/Time: April 3, 2014 10:12 A.M.

EPA walked around the north side of the Finishers Barns and south on the east side of Barns #7, #6, and #5. EPA observed the flow of storm water from the west through the culvert pipes under the barn walkways. Another pull plug standpipe was located in a channel east of Barn #6. EPA noted spilled feed on the ground around the barns and below the bulk bins that could be transported with the precipitation. The pull plug standpipe has to be manually lifted to allow the flow of storm water and process wastewater to enter the piping that transported it to the manure ponds. If the pull plug is not lifted before the channel overtopped, the storm water and process wastewater would either flow overland to the unnamed tributary or would flow via the storm water pipe on the west side of the West Barn to the unnamed tributary.





32: IMGP0055

Description: Storm water from the west side of Barn #6, outlets on the east side. Feed spilled on the ground can be transported with the precipitation.

Location: East of Barn #6

Camera Direction: East

Date/Time: April 3, 2014 10:16 A.M.

EPA concluded the walk through and explained to the facility manager that samples were going to be taken from certain areas of the facility. While EPA prepared the sampling supplies, the facility manager went to the office to let the facility owner know of the sampling plans. EPA offered to split the samples with the facility owner. The facility manager stated that the facility owner declined to split samples.

EPA took the first sample, S01, named "Compost puddle" at 10:46 A.M. from a puddle on the outside of the berm around the Compost Pile where the puddle appeared to contain leachate from the compost.

EPA then followed the flow pathway from the Compost Pile to the southeast and then south to the perennial unnamed tributary. EPA noted the differently colored plume in the puddle and in the flow pathway from the Compost Pile. EPA documented that the flow from the Compost Pile followed along the ground and was unbroken and continuous all the way to the unnamed tributary. At the stream bank, a channel had been eroded through the bank from the flow of water.

Spilled feed on the ground around the bulk bins east of the Wash Bay would also travel with the precipitation to the channel and the unnamed tributary.





33: IMGP0056

Description: Sample S01, "Compost puddle" was taken at 10:46 A.M. from a puddle on the outside of the berm around the Compost Pile where the puddle appeared to contain leachate from the compost.

Location: Southeast corner of the Compost Pile

Camera Direction: Down

Date/Time: April 3, 2014 10:46 A.M.



34: IMGP0057

Description: Note the plume of leachate in the puddle from the compost.

Location: Southeast corner of the Compost Pile

Camera Direction: Down and south

Date/Time: April 3, 2014 10:46 A.M.





35: IMGP0058

Description: The flow of water from the puddle is unbroken all the way to the stream.

Location: Southeast corner of the Compost Pile

Camera Direction: Southeast

Date/Time: April 3, 2014 10:46 A.M.



36: IMGP0060

Description: The flow of water from the southeast corner of the Compost Pile goes around the east side of the Wash Bay. Spilled feed on the ground would also flow with the precipitation to the unnamed tributary.

Location: Northeast corner of the Wash Bay

Camera Direction: Southeast

Date/Time: April 3, 2014 10:48 A.M.





37: IMGP0061

Description: The flow of water from the southeast corner of the Compost Pile goes around the east side of the Wash Bay.

Location: Northeast corner of the Wash Bay

Camera Direction: South

Date/Time: April 3, 2014 10:48 A.M.



38: IMGP0062

Description: The plume of leachate from the Compost Pile is still visible in the flow pathway east of the Wash Bay.

Location: East of the Wash Bay

Camera Direction: Down





39: IMGP0064

Description: The flow of water from the southeast corner of the Compost Pile channelizes at the edge of the facility access road and flows into the perennial tributary.

Location: East of the Wash Bay

Camera Direction: Southwest

Date/Time: April 3, 2014 10:49 A.M.



40: IMGP0066

Description: Storm water from the east side of the facility and process wastewater from the Compost Pile and spilled feed on the ground flows into the perennial tributary.

Location: South of the Wash Bay

Camera Direction: Down and southwest



EPA took sample number two, S02, named "Compost Stream, at 10:52 A.M. from the flow at the confluence of the pathway that began with the puddle at the Compost Pile and the unnamed tributary.



41: IMGP0070

Description: Sample S02, "Compost Stream", was taken at 10:52 A.M. from the stream of storm water and process wastewater from the Compost Pile at the the confluence with the perennial tributary.

Location: South of the Wash Bay

Camera Direction: Down

Date/Time: April 3, 2014 10:52 A.M.

EPA walked to the west and took the third sample, S03, named "Black Pipe", at 10:57A.M. from the flow coming out of the black pipe at the head of the ditch north of the unnamed tributary. EPA took the fourth sample, S04, named "Duplicate of Black Pipe" from the same location at 11:00 A.M. No duplicate fecal coliform sample was taken.

EPA noted the flow of storm water that flowed into the head of the ditch from the west side of the facility. Spilled feed noted at the loading ramp and from between the barns would be transported with the precipitation to this ditch either via overland flow pathways or via the buried storm water pipe that outletted here.

EPA took the fifth sample, S05, named "SW Flow" at 11:05 A.M. from the overland flow pathway that entered the ditch where the black storm water pipe outletted. EPA noted that the overland flow pathway was unbroken and continuous from the west side of the facility.





42: IMGP0077

Description: Sample S03, "Black Pipe", was taken at 10:57 A.M. from the flow coming out of the black pipe.

Location: North end of the ditch where the black pipe outlets.

Camera Direction: Down and northwest

Date/Time: April 3, 2014 10:57 A.M.



43: IMGP0078

Description: Sample S04, "Duplicate of Black Pipe", was taken at 11:00 A.M. from the flow coming out of the black pipe. No duplicate fecal coliform sample was taken.

Location: North end of the ditch where the black pipe outlets.

Camera Direction: Down and northwest

Date/Time: April 3, 2014 11:00 A.M.





44: IMGP0081

Description: Sample S05, "SW Flow", was taken at 11:05 A.M. from the overland flow pathway that also entered the ditch by the black pipe.

Location: North end of the ditch where the black pipe outlets.

Camera Direction: Down and northwest

Date/Time: April 3, 2014 11:05 A.M.



45: IMGP0083

Description: Unbroken path of storm water from the west side of the facility to the ditch.

Location: North end of the ditch where the black pipe outlets.

Camera Direction: Northwest

Date/Time: April 3, 2014 11:05 A.M.



EPA took a field blank, S06, named "Blank", at 11:13 A.M. near where the EPA vehicle was parked and then preserved the samples. EPA put the samples in a cooler in the EPA vehicle, locked the vehicle, and then went to the facility office to give a closing conference to the facility owner.

### **2.3 Closing Conference and Post-Inspection**

**Table 12: Post Walk-Through**

<b>Were specific "Potential Violations" discussed with facility personnel?</b>	Yes
<b>Were specific "Areas of Concern" discussed with facility personnel?</b>	Yes
<b>Who were the Potential Violations or Areas of Concern discussed with?</b>	
The facility owner.	
<b>Compliance assistance materials given to facility personnel:</b>	
Compliance materials were given on the first inspection in July 2012. No additional compliance assistance materials were given during this inspection.	
<b>Exit Time:</b>	12:20 P.M.
<b>Disposable Boots Left at Facility?</b>	Yes
<b>Vehicle Washed after leaving facility?</b>	Yes
<b>Date and Time that vehicle was washed:</b>	April 3, 2014 at 6:30 P.M.

**Table 13: Waterway Documentation**

<b>List the pathway taken by EPA inspectors to document the waterway at the facility.</b>
EPA visually observed and took photographs of the overland flow pathways from the east and west sides of the facility to the perennial unnamed tributary. Prior to entering the facility, EPA observed flow in the perennial tributary downstream of the facility on Route 45. The perennial tributary flows under Route 45 north of the road 100 N.

**Table 14a: Sampling Information**

<b>Were samples taken?</b>	Yes
<b>Were samples split with facility?</b>	No
<b>Number of samples taken?</b>	Six
<b>Was a trip blank created (done prior to entering the facility)?</b>	Yes, at the facility
<b>Identify which sample is the trip blank.</b>	S06
<b>Were field duplicate samples taken (1 duplicate per 20 samples)?</b>	Yes
<b>Identify which sample(s) is/are the field duplicate(s)</b>	S04
<b>Were equipment blanks taken (if more than one type of equipment was used to collect samples)?</b>	No
<b>Identify which samples were equipment blanks.</b>	N/A



<b>List chain of custody for fecal coliform samples:</b>	EPA to Microbac Laboratory Services in Merrillville, IN at 4:20 P.M. on 4/3/14.
<b>List chain of custody for nutrient and general chemistry samples:</b>	EPA to R5 CRL in Chicago, IL at 8:53 A.M. on 4/4/14.
<b>Location where samples were preserved:</b>	At the facility.
<b>Name of people involved with sample preservation:</b>	Joan Rogers Cheryl Burdett
<b>Time of sample preservation:</b>	Approximately 11:15 A.M.
<b>Were samples shipped to a lab?</b>	No
<b>Name/Address of shipping location:</b>	N/A
<b>Date and time that samples were dropped off for shipping:</b>	N/A
<b>Did all inspectors involved with the sampling sign the chain of custody?</b>	Yes for the fecal samples. Only Joan Rogers signed the chain of custody for Nutrient and General Chemistry samples.
<b>Were holding times met for all samples? (If not, explain why.)</b>	No. The Nitrate-Nitrite samples' holding time was missed by one day because of instrument problems at the Region 5 CRL. These samples were flagged "J" (estimated).
<b>Weather conditions at the time of sample collection:</b>	Rain and 60°F
<b>Camera name and type used to photograph sample collection:</b>	Pentax Optio – GPS Camera #1



**Table 14b: Facility Sample Information**

Number	Name	Location	Date	Time	Collector	Color/ Smell	Photo #	Photo- grapher	Method of Collection	# of Sulfuric Acid Drops
S01	Compost puddle	Puddle outside Compost Pile berm	4/3/14	10:46 A.M.	JR	Dark colored/no smell taken	IMGP0056 IMGP0059	CB	Grab	41
S02	Compost Stream	Confluence of flow from Compost Pile and the unnamed tributary	4/3/14	10:52 A.M.	JR	Dark colored/no smell taken	IMGP0068 IMGP0069 IMGP0070 IMGP0071 IMGP0072	CB	Grab	11
S03	Black Pipe	From Black Pipe at head of ditch	4/3/14	10:57 A.M.	JR	Medium brown/no smell taken	IMGP0075 IMGP0077	CB	Grab	12
S04	Duplicate of Black Pipe	From Black Pipe at head of ditch	4/3/14	11:00 A.M.	JR	Medium brown/no smell taken	IMGP0077 8 IMGP0077 9 IMGP0078 0	CB	Grab	12
S05	SW Flow	From overland flow pathway at its confluence with the unnamed tributary	4/3/14	11:05 A.M.	JR	Medium brown/no smell taken	IMGP0081 IMGP0082	CB	Grab	11
S06	Blank	By office of facility	4/3/14	11:13 A.M.	JR	Clear/no smell taken	None	CB	Grab	5



**Table 15: Sample Results**

<b>Sample ID</b>	<b>Sample Description (all liquid samples unless otherwise noted)</b>	<b>Biochemical Oxygen Demand (mg/L)</b>	<b>Total Kjeldahl Nitrogen (mg/L)</b>	<b>Nitrate-Nitrite N (mg/L)</b>	<b>Ammonia as N (mg/L)</b>	<b>Total Phosphorus (mg/L)</b>	<b>Total Dissolved Solids (mg/L)</b>	<b>Total Suspended Solids (mg/L)</b>	<b>Fecal Coliform (CFU/100ml)</b>
	<i>Typical limits</i>			<i>0.1 *</i>	<i>15</i>	<i>.05</i>	<i>1000</i>		<i>200**</i>
<b>S01</b>	Compost puddle	580	332	2.48 (J)	196	42.1	2560	314	19,000
<b>S02</b>	Compost Stream	66	36.0	1.30 (J)	4.90	18.0	344	1920	37,000
<b>S03</b>	Black Pipe	66	19.7	2.76 (J)	3.68	6.82	280	1490	25,000
<b>S04</b>	Duplicate of Black Pipe	63	13.2	3.45 (J)	4.21	5.60	232	1040	None taken
<b>S05</b>	SW Flow	55	18.5	3.41 (J)	1.69	9.10	280	1460	23,000
<b>S06</b>	Blank	6	U	U (J)	U	U	U	U	None taken

U = Not Detected

The typical limits are for general use waters and this data comes from the Illinois Water Quality Standards (IEPA 2004) unless otherwise noted. There are no Water Quality Standards for Biochemical Oxygen Demand, Total Kjeldahl Nitrogen, Nitrate-Nitrite, and Total Suspended Solids but some limits are provided and are meant to be a benchmark for comparison only.

\* Maximum Nitrate-Nitrite amount for aquatic life (North Carolina State University Water Quality Group)

\*\*Although there are no effluent limits for CAFOs, from May to October the limit in Illinois for Fecal Coliform in a stream for general use is 200 count/100ml.

(J) The Nitrate-Nitrite samples' holding time was missed by one day because of instrument problems at the Region 5 CRL. These samples were flagged "J" (estimated).

- The Fecal Coliform results were analyzed by Microbac Laboratory Services, 250 West 84<sup>th</sup> Drive, Merrillville, IN 46410.
- Ammonia Nitrogen, Total Phosphorus, Nitrate-Nitrite, Dissolved Solids (TDS), Total Suspended Solids (TSS), Total Kjeldahl Nitrogen (TKN), and Biochemical Oxygen Demand (BOD) were analyzed by the Region 5 Chicago Regional Laboratory, 560 S Clark Street, Chicago, IL 60605.



### **3. POTENTIAL VIOLATIONS**

According to Section 301(a) of the Clean Water Act, it is a violation to discharge pollutants from a CAFO to waters of the United States without a permit. EPA observed discharges in the following locations:

1. From the Compost Pile to the perennial unnamed tributary via overland flow pathway.
2. From manure and process wastewater from the open pens between Barns #3 and #4 via a pipe in that area to the ditch just north of the perennial unnamed tributary and then into the stream.
3. From spilled feed on the ground around the feed loading area and around and below the bulk bins to the perennial unnamed tributary via either overland flow pathway on the west side of the Wash Bay or to the storm water pipe which outlets at the ditch north of the perennial unnamed tributary and then into the stream.

### **4. AREAS OF CONCERN**

EPA observed these areas of concern whereby pollutants have the potential to reach waters of the United States:

1. From spilled feed on the ground around and below the bulk bins to the perennial unnamed tributary via overland flow pathway on the east side of the Wash Bay.

### **5. LIST OF ATTACHMENTS**

- A) Aerial photograph of FOIA Ex 6 [REDACTED] Pork with buildings, waterways and discharge pathways labeled.



